Amendments to the Claims:

Claim 1 (Previously Presented): A method for transforming output formats of video data, the video data comprising a plurality of first display data and a plurality of second display data, the plurality of first display data corresponding to a plurality of first odd fields, the plurality of second display data corresponding to a plurality of first even fields, the plurality of first odd fields and the plurality of first even fields being interlaced to form a plurality of first frames, the plurality of first frames corresponding to a first resolution, the method comprising:

(a) deinterlacing the plurality of first display data and the plurality of second display data to generate a plurality of third display data;

(b) arranging the plurality of third display data to make the plurality of third display data correspond to a second resolution; and

(c) extracting a plurality of fourth display data corresponding to a plurality of second odd fields from the plurality of third display data, and extracting a plurality of fifth display data corresponding to a plurality of second even fields from the plurality of third display data,

wherein the plurality of first display data and the second display data can be used to drive the plurality of first frames according to a first frame rate, and in step (c), the plurality of fourth display data and the plurality of fifth display data are generated according to a second frame rate.

Claim 2 (Original): The method of claim 1 further comprising: interlacing the plurality of fourth display data and the plurality of fifth display data to form a plurality of second frames corresponding to the second resolution.

Claim 3 (Original): The method of claim 1 wherein in step (c), only partial data is extracted from the plurality of third display data to generate the plurality of fourth display data and the plurality of fifth display data.

Claim 4 (Cancelled).

Claim 5 (Previously Presented): The method of claim 1 wherein the first frame rate and the first resolution conform to an NTSC (National Television System Committee) specification, while the second frame rate and the second resolution conform to a PAL (Phase Alternation Line) specification.

Claim 6 (Original): The method of claim 1 wherein in step (b), a bi-linear interpolation is applied to arrange the plurality of third display data.

Claim 7 (Original): The method of claim 1 wherein in step (a), a motion adaptive deinterlace algorithm is applied to generate the plurality of third display data.

Claim 8 (Cancelled):

Claim 9 (Currently Amended): A method for transforming output formats of video data, the video data comprising a plurality of first display data and a plurality of second display data, the plurality of first display data corresponding to a plurality of first odd fields, the plurality of second display data corresponding to a plurality of first even fields, the plurality of first odd fields and the plurality of first even fields being interlaced to form a plurality of first frames, the plurality of first frames corresponding to a first resolution, the method comprising:

(a) deinterlacing the plurality of first display data and the plurality of second display

data to generate a plurality of third display data;

(b) arranging the plurality of third display data to make the plurality of third display data correspond to a second resolution;

(c) extracting a plurality of fourth display data corresponding to a plurality of second odd fields from the plurality of third display data, and extracting a plurality of fifth display data corresponding to a plurality of second even fields from the plurality of third display data, and

(d) ~~The method of claim 8 further comprising:~~ interlacing the plurality of fourth display data and the plurality of fifth display data to form a plurality of second frames corresponding to the second resolution[[.]];

wherein in step (a), a motion adaptive deinterlace algorithm is applied to generate the plurality of third display data.

Claim 10 (Currently Amended): A method for transforming output formats of video data, the video data comprising a plurality of first display data and a plurality of second display data, the plurality of first display data corresponding to a plurality of first odd fields, the plurality of second display data corresponding to a plurality of first even fields, the plurality of first odd fields and the plurality of first even fields being interlaced to form a plurality of first frames, the plurality of first frames corresponding to a first resolution, the method comprising:

(a) deinterlacing the plurality of first display data and the plurality of second display data to generate a plurality of third display data;

(b) arranging the plurality of third display data to make the plurality of third display data correspond to a second resolution; and

(c) extracting a plurality of fourth display data corresponding to a plurality of second odd fields from the plurality of third display data, and extracting a plurality of fifth display data corresponding to a plurality of second even fields from the plurality of third display data,

wherein in step (a), a motion adaptive deinterlace algorithm is applied to generate the plurality of third display data, and ~~The method of claim 8 wherein~~ in step (c), only partial data is extracted from the plurality of third display data to generate the plurality of fourth display data and the plurality of fifth display data.

Claim 11(Canceled):